

ABSTRACT

A 1:1 mask and a wafer are arranged so as to be vertical. Thus, a pattern portion of the 1:1 mask does not warp at all and, therefore, even when the mask has no beam, it is not necessary to strongly stretch a pattern portion thereof. Further, a gap between the mask and the wafer can be further reduced. Since it is not necessary to strongly stretch the pattern portion of the stencil mask, a very thin membrane can be bonded to the pattern portion. Thus, even when the acceleration voltage of an electron beam is as low as several kV, it is possible to use a mask called a membrane mask and carry out pattern formation by one-time exposure even in the case of a doughnut-shaped pattern.